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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,656	11/29/2001	Yosuke Kusaka	111231	2644
25944	7590	02/21/2006	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			AGGARWAL, YOGESH K	
			ART UNIT	PAPER NUMBER

2615

DATE MAILED: 02/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/995,656	<b>Applicant(s)</b> KUSAKA, YOSUKE	
	<b>Examiner</b> Yogesh K. Aggarwal	<b>Art Unit</b> 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 8-11, 13, 15 and 17-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-11, 13, 15, 17-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Arguments***

1. Applicant's arguments filed 8-11, 13,15 and 17-22 have been fully considered but they are not persuasive.

**Examiner's response:**

2. Applicant argues with regards to claim 8 that Kiyokawa fails to teach what happens, if, or when, communication with the external device is disabled. The Examiner respectfully disagrees. Kiyokawa teaches that the camera on the master side transmits a transmission stop command to the slave side camera (col. 9 lines 25-32, figure 8) and the slave side camera performs control by stopping transmission of the image data (col. 9 lines 33-39). Therefore the communication is disabled and the slave side camera stores the image in the frame memory 15 (col. 9 lines 40-43).

3. Applicant argues that Kiyokawa fails to teach that image capture device comprising an operation member that operates to cause the image sensor to capture a subject image. The Examiner respectfully disagrees. It would be inherent that once the image data is stored in the memory the operation member 45 be operated to cause the image sensor to capture a next subject image (figure 3, col. 6 lines 50-51).

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2615

5. Claims 8-10, 15, 17, 19, 20 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Kiyokawa (US Patent # 6,204,877).

[Claims 8 and 15]

Kiyokawa teaches an image-capturing device (figure 8, slave side camera transmitting image data), comprising an image sensor (figure 2b, image pickup circuit 5) that captures a subject image and generates image data (col. 3 lines 61-65); an operation member (figure 3, trigger switch 45) that operates to cause the image sensor to capture a subject image and generate image data (col. 6 lines 49-50), a memory (IC card memory 19 that is detachable) and an image storage control unit (controller 20) that controls transfer of image data and is operable in a communication mode to automatically transfer image data generated by the image sensor to an external device (figure 8, master side camera receiving image data) via a communication circuit (figure 2b, data input/output section 27) capable of communicating with the external device to store the image data in the external device, and if the external device is substantially unusable to transfer image data generated by the image sensor to the memory (col. 9 lines 18-54, figure 8). It would be inherent that once the image data is stored in the memory the operation member 45 can be operated to cause the image sensor to capture a next subject image.

[Claims 9, 19, 20]

Kiyokawa teaches that the IC memory card 19 is detachably mounted in the image-capturing device (col. 4 lines 26-29).

[Claim 10]

Art Unit: 2615

Kiyokawa teaches that the slave device checks at step S52 (figure 8), if an “image data transmission stop command is transmitted” and if so it stops transmission of the image data (step S53) and stores the image data in the memory (step S54, col. 9 lines 33-45, figure 8).

[Claim 17]

Kiyokawa teaches in step S52 (figure 8) that if an “image data transmission stop command is transmitted” were not generated (NO LOOP) then the image would be transmitted (step S51) and therefore would not be stored in the memory.

[Claim 21]

Kiyokawa teaches at step S55 (figure 8) to transfer the image data to the master side when it becomes usable.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kiyokawa (US Patent # 6,204,877) in view of Niwa (US Patent # 6538692).

[Claim 11]

Kiyokawa teaches the limitations of claim 8 but fails to teach wherein image storage control unit detects whether or not a storage capacity of the external device is sufficient and transfers the image data generated by the image sensor to the memory if the storage capacity of the external device is detected to be insufficient.

However Niwa teaches an image recording medium (figure 2, CCD camera 2) having an external recording medium, a unit separate from the image recording medium, coded data is written on the external recording medium 12, space available on the external medium is reduced and, eventually, the available space on the external recording medium 12 becomes less than the amount of coded picture data to be recorded next. At this time, the determination module 30 sends the write disable signal to the external R/W controller 10, and the write enable signal to the internal R/W controller 22. The determination module 30 sends these control signals each time it detects such a condition. These signals prevent coded picture data from being written on the external recording medium 12 and cause it to be written into the internal memory 24. Coded picture data is written into the internal memory 24 until a user issues a stop instruction or until the internal memory 24 becomes full (col. 6 line 55-col. 7 line 5) in order to provide a data storage control method and system that prevent a situation in which recording is interrupted because an external medium becomes full before all intended data is recorded.

Therefore taking the combined teachings of Kiyokawa and Niwa it would have been obvious to one skilled in the art at the time of the invention to have been motivated to have an image storage control unit detects whether or not a storage capacity of the external device is sufficient and keeps the image data within the image-capturing device if the storage capacity of the external device is detected to be insufficient as taught in Niwa in order to provide a data storage control method and system that prevent a situation in which recording is interrupted because an external medium becomes full before all intended data is recorded.

8. Claims 18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiyokawa (US Patent # 6,204,877) in view of Cook (US Patent # 6,788,332).

Art Unit: 2615

[Claim 18]

Kiyokawa teaches the limitations of claim 8 but fails to teach a wireless communication medium. However Cook teaches a device 10 (figure 1) having a digital camera (11) with a wireless transceiver (22) in order to transmit images wirelessly (col. 2 lines 34-38).

Therefore taking the combined teachings of Kiyokawa and Cook it would have been obvious to one skilled in the art at the time of the invention to have been motivated to have a wireless transceiver inside a digital camera. The benefit of doing so would be to make the digital camera portable as taught in Cook (col. 2 line 20) which means it can be used to transmit images from a rough terrain to a PC wirelessly where no landlines are available.

[Claim 22]

See Examiner notes regarding rejection of claims 8 and 18 respectively.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nanba (US Patent # 6,297,870), Jones (US Patent # 5,928,347) and in further view of Moronaga et al. (US Patent # 5,956,084).

[Claim 13]

Nanba discloses an image-capturing device that is an electronic camera (figure 4) comprising an image sensor (303) that captures a subject image and generates image data (col. 4 lines 28-30), a buffer memory (209) that temporarily stores the image data (col. 5 lines 43-49), a connection unit (212) that is a slot (figure 3, element 17) that electrically and detachably connects a portable memory that is a memory card (8) to a main body (col. 5 lines 66-67), a USB communication circuit (213) capable of communicating with an external device (col. 6 lines 1-3). It would be obvious that an image storage control unit (211) will store the image data temporarily into a

Art Unit: 2615

buffer memory (209) and transfer it directly and automatically into the portable memory (8) connected at said connection unit (212). Nanba also teaches transferring the image data temporarily stored at said buffer memory to the portable memory 8 if it is connected at said connection unit (col. 7 line 21-col. 8 line 23, figures 6A-6B). Nanba further teaches in a case where the memory card 8 is not installed in the digital camera 1 or the remaining capacity of the memory card 8 is not sufficient, the photographed image is automatically recorded in the hard disk HD of the PC 1000. In other words, the recording destination of the photographed image can be controlled depending on whether or not the memory card 8 is installed in the digital camera 1 (col. 8 lines 14-23). Therefore Nanba teaches detecting a memory card is installed or not and if it is not installed the data is transferred to an external device.

Nanba fails to teach a portable memory card interface device that functions as either a portable memory or a wireless communication circuit capable of wirelessly communicating with an external device and an image storage control unit that controls transfer of image data to automatically and directly transfer the image data generated by the image sensor to the portable memory if the portable memory is connected at the connection unit.

However Jones teaches a universal memory card interface 10 that has the capability to have a memory card 52 (figure 2) and an infrared interface (wireless) 124 connected to the interface 10 to transmit data wirelessly to peripheral devices.

Therefore taking the combined teachings of Nanba and Jones, it would be obvious to one skilled in the art at the time of the invention to have been motivated to use the universal memory card interface of Jones into the camera of Nanba to have a portable memory card device that functions as either a portable memory or a wireless communication circuit capable of wirelessly



Art Unit: 2615

communicating with an external device and therefore detects whether the wireless device is connected. The benefit of doing so would be to have a memory card and a wireless device be configured on a semiconductor integrated circuit so as to reduce a circuit size on one hand and to realize a small package.

Nanba in view of Jones fails to teach an image storage control unit that controls transfer of image data to automatically and directly transfer the image data generated by the image sensor to the portable memory if the portable memory is connected at the connection unit.

However Moronaga et al. teach an electronic still video camera having an internal RAM (figures 4 and 5, element 28) be directly transferred automatically to an external RAM via switch 116 and 153 when the internal frame is full (col. 14 lines 9-31).

Therefore taking the combined teachings of Nanba, Jones and Moronaga, it would be obvious to one skilled in the art at the time of the invention to have been motivated to have an image storage control unit that controls transfer of image data to automatically and directly transfer the image data generated by the image sensor to a portable memory if the portable memory is connected at the connection unit in order to have the operation of data transfer attained in a simplified manner.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

Art Unit: 2615

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yogesh K. Aggarwal whose telephone number is (571) 272-7360. The examiner can normally be reached on M-F 9:00AM-5:30PM.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571)-272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YKA  
February 14, 2006

  
TUAN HO  
PRIMARY EXAMINER